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## 1.0 Summary

### 1.1 Overview

Navajo County is required by state law to have a comprehensive plan. The law says the purpose of the plan is to make sure public funds are spent wisely, natural resources are conserved, and the health, safety and welfare of the residents are enhanced. The County has always had such a plan. This is the latest version. It is a living document that can be amended anytime through proper procedures. It must be reviewed and updated every ten years. It is simply a guide to future growth and land use. The Plan assists the Board of Supervisors, the Planning & Zoning Commission and the County staff in making land-use decisions. It does not change any zoning or affect anyone's property rights. The "regulatory" documents (the "laws") are the Zoning Ordinance, the zoning maps and the related codes like the Uniform Building Code, etc. The comprehensive plan is a "philosophical" document that can help the County grow and preserve its customs, cultural and rural historical values in a logical and orderly way and respond to future challenges. It will assist the County in "Growing Smarter" (which happens to be the name of the state law on which this version is based). It is a vision of the future in which each resident of the County has a stake and the County welcomes and encourages the participation of all residents as the plan evolves over the years. THIS PLAN DOES NOT CHANGE THE ZONING OF ANY PARCEL.

The planning process is structured to emphasize public involvement and incorporate comments, ideas, and direction of the public into the plan. This plan strives to create strong and vibrant communities within Navajo County by encouraging orderly development. The State of Arizona projects an increase in population in the County of approximately 49,000 persons, or 50 percent of its population in 2000, in the next 50 years. Such growth, coupled with the increase in the number of second/vacation homes and the accompanying "phantom" population that is not reflected in census numbers or other official statistics, demands careful planning to accommodate the new residents and industry and to maintain the character and quality of life of the County that are important to current residents.

### 1.2 Definitions Used in This Plan

"Area Plan" is a designation given to a specific land area on the map that indicates as to how that area may develop over time using some specific land use designations, guidelines, goals and/or objectives.

"Character Area" is a designation given to a general land area on the map that indicates as to how that area may develop over time using some general guidelines, possible density limitations, etc. A CHARACTER AREA MAY ALSO BE AN AREA PLAN.

"Development" as used in this plan, means those areas where the property owner(s) desire to initiate a subdivision plat, or a zone change in order to process a subdivision plat, or initiate site plans for possible new commercial/industrial locations, etc., according to state statute and Navajo County Ordinances.

"Growth" means an area that is experiencing more parcel splits as per following the state statutes, or platting of subdivisions, or an increase of in-fill of vacant parcels, etc.

"Special Development" is land under unified control to be developed in a single development or a programmed series of phases that incorporate mixed uses of housing

types, commercial operations, etc. A "Special Development" includes the provisions, operations, maintenance, facilities and improvements that will be for the common use of the development district, but which is not NORMALLY be maintained at general public expense.

"Subdivision" means improved or unimproved land or lands divided or proposed to be divided for the purpose of sale or lease, whether immediate or in the future, according to state statutes.

"Zoning Ordinance" means the ordinance adopted by Navajo County that regulates and controls the character and use of property to protect the public safety, health and welfare.

### 1.3 How to Use the Plan

The Comprehensive Plan provides a guide for decisions by the Planning and Zoning Commission and the Board of Supervisors concerning growth and development, which would include serving as a basis for decisions regarding updates to the zoning map and in approval of subdivision plats. It provides an understanding of existing and proposed land use for the public, decision-makers, and developers.

**This Plan is strictly advisory in nature; it is not a regulatory document.** Rather, it establishes a long range vision for development of Navajo County and is a foundation for change. Its goals and policies aim for an "ideal" scenario, meaning that occasionally one goal may be in conflict with another goal. Circumstances may also arise that are not directly addressed by the Plan. For example, the issues related to the geography of a particular site or the circumstances of a specific proposal are rarely straightforward. As such, the Plan provides guidance in the decision making process, but not the "final word".

One primary concern must be fair resolution of conflicting interests. All institutions - political, social, economic, and educational need to work together to address their varied interests, values, desires, and the perception of what goals, objectives, and strategies are needed for growth and development in the county. Public involvement is essential in the development of these broadly stated goals.

These broad goals are the foundation on which land use policies and proposals have been constructed to help provide a means of addressing some of the specific and widely differing individual interests and for integrating them on a countrywide basis through the vehicle of the Comprehensive Plan.

Some revisions to the text of the *County Zoning Ordinance* (the "Zoning Ordinance") may be necessary to make many of the goals, policies and concepts in this Plan effective. The Subdivision Regulations and Requirements may also be amended. This Plan is based on the premise that the County may review the Zoning Ordinance to see if adjustments are necessary, as requested or shown there is a demonstrated need; including adding to or revising some zoning districts definitions, possibility adding new designations, etc. The character areas in the Land Use Element, discussed below, suggest possible development standards that the County could include in its revisions to the Subdivision Regulations & Requirements to mitigate impacts between land uses, provide protection of existing land uses, give land owners and investors some assurance as to what development is possible on their land and adjoining properties, and continue to provide flexibility in the potential use of property.

#### 1.4 Land Use

Given the vast area and primarily rural character of Navajo County, the Area Plans and character areas in the plan represent generalized land use, development, or preservation concepts that recognize and promote existing development patterns. The Area Plans and character areas take the place of more traditional land use categories as this Comprehensive Plan is intended to set a general framework for development in the County rather than establish a more precise guide that mirrors a zoning district map. Upon approval by the Board of Supervisors of this Plan, the County will use the Plan to develop Zoning Ordinance and/or Subdivision Regulations & Requirements revisions for Board of Supervisors consideration. As noted in Section 1.2, such revisions are necessary to effectuate the goals, policies and concepts contained in this Plan.

#### 1.5 Circulation

The circulation system will provide an efficient and safe movement of persons and goods within and through Navajo County. This system also is to be environmentally compatible with the surrounding conditions and supportive of economic development. Most of the development within the County has occurred, or will occur, along the major paved transportation corridors. As such, the circulation system is not only responsible for circulation but is also directing areas of growth within the County, with the intersections of well traveled transportation routes being the locations of greatest growth potential. Top priority should also be given to school bus routes.

#### 1.6 Applicability

This Comprehensive Plan applies only to unincorporated areas of Navajo County. The Plan does not apply to the incorporated areas, unincorporated property that is addressed in an adopted area or community plan, and land that is currently part of the Hopi, Navajo, or White Mountain Apache Reservations or within the boundaries of a reservation. When the respective tribal nations develop plans that would approach their borders of the non-reservation areas of the county, then these plans would be dove-tailed at those boundaries into the attached maps, as appropriate. Further, any specific area plan developed by a reservation community would be referenced herein, as hopefully they would also be supportive of this plan. Given these exceptions, the Plan focuses primarily on the central to southern portion of the County, with the majority of the covered area lying south of Interstate 40.

The following area or community plans, in the unincorporated areas of Navajo County, are referenced herein and support the Comprehensive Plan. This Comprehensive Plan does not address further the land covered in these area plans, as those plans are the controlling planning documents for their areas. The Comprehensive Plan Land Use Map, discussed in Section 4.4, references the area plans of:

Heber-Overgaard  
Pinetop-Lakeside/Navajo County Regional Plan  
AZTEC AREA PLAN

Deleted: assigns no character areas to these areas but

#### 1.7 Previous Comprehensive Plans

This Comprehensive Plan shall replace all previous Comprehensive Plans.

## 1.8 Amendments to the Comprehensive Plan

An amendment to the Comprehensive Plan shall be necessary when a proposed land use for a property does not conform to land uses established in this Plan for the property's designated character area, discussed in the Land Use Element. The Board of Supervisors may establish a fee and a public hearing process for Comprehensive Plan amendments. The character areas included in this Plan allow a wide and extensive range of land uses. Virtually every existing zoning designation is allowed in every character area. Given this breadth of permissible uses in the character areas, few changes of land use will require a Comprehensive Plan amendment.

A Major Amendment is one or more of the following:

- A substantial alteration of the County's land use mixture or balance as established in the Comprehensive Plan Land Use Element for the area of the County to which the Comprehensive Plan applies.
- A change from the Recreation, Highway Service, or Environmentally Sensitive Development Area character areas to any other character area and encompasses more than 500 acres.
- A change to any of the other character areas and encompasses more than 1000 acres.
- A new Area Plan or a change to an Area Plan that meets any of the above criteria.

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An amendment would not be required if the current zoning allows development. The public hearing process for a Major Amendment must satisfy the requirements of A.R.S. § 11-824.C.

## 2.0 Introduction

### 2.1 Role and Purpose of the Comprehensive Plan

County government is required by state law to prepare a Comprehensive Plan for the unincorporated areas (A.R.S. §11-806). This Plan shall address challenges facing the County and presents opportunities for the continuing success and diversity of the region by:

Encouraging coordinated physical development in accordance with the present and future needs of the county.

Promoting stewardship of and respect for the natural and cultural resources of the County.

Guiding growth to achieve efficient expenditure of public funds.

Protecting investments in private property.

Promoting the health, safety, convenience, and general welfare of the public.

Encouraging economic growth and diversity.

The planning process is structured to emphasize public involvement and incorporate comments, ideas, and direction of the public into the plan.

The Statute requires counties to prepare a comprehensive plan to guide coordinated, adjusted, and harmonious development within the County. Navajo County has elected to include a Land Use Element and a Circulation Element. Navajo County is incorporating planning for growth areas and covering the cost of growth in its Land Use Element.

## 2.2 Land Use Element

The Land Use Element includes the following:

Planning for land use that describes the proposed character areas of uses for land appropriate to Navajo County. The character areas reflect Navajo County's vision for the area and discuss the types of development, such as residential, commercial, recreational, that are expected to help the County and its residents realize this vision. This planning includes:

- Consideration of air quality and access to incident solar and wind energy for all character areas.
- Strategies that address maintaining a broad variety of land uses including the range of uses existing in the county at the time the plan is adopted, readopted, or amended.
- Planning for growth areas, specifically identifying those areas that are particularly suitable for infrastructure expansion and improvements designed to support a concentration of land uses, such as residential, commercial, and tourism uses. This planning includes:
  - A possible method to make infrastructure expansion more economical and to provide for a rational pattern of land development.
  - Goals to conserve significant natural resources and open areas in growth areas and to coordinate their location with similar areas outside of the growth areas.
  - Possible promotion of public and private construction of timely and financially sound infrastructure expansion through the use of infrastructure funding and financing planning that is coordinated with development activity.

Addressing the cost of development through identification of policies and strategies that Navajo County could use to require development to pay its fair share toward the cost of additional public facility needs generated from new development. The information includes:

- A component discussing the mechanisms allowed by law to fund and finance additional public services necessary to serve a new development, including special taxing districts, development fees, in lieu fees and facility construction, dedications, and privatization.

- A component discussing policies that will ensure that any financing/funding mechanism will result in a beneficial use to the new development, bear a reasonable relationship to the burden imposed on Navajo County to provide additional necessary public facilities to the new development, and be imposed in conformance to legal requirements.

## **2.3 Circulation Element**

The Circulation Element includes the following:

Planning for circulation consisting of the general location and extent of existing and proposed interstate highways, state highways, paved county highways, non-paved but maintained county roadways, and primitive roads, and other modes of transportation.

Correlation of circulation planning with the Land Use Element to direct growth in Navajo County.

## **2.4 Planning Process**

Planning is a process wherein the vision of what the county may look like in the future, say 20, 40, or 50 years away, are put down on paper. Through public input, participation in meetings, etc., this vision is created as a guide to all.

In early 2002, seven public meetings were held by staff in the local community areas, such as: Pinedale/Clay Springs, White Mountain Lake, Woodruff, Sun Valley, etc., to start gathering local desires. Later on a draft was started and got going by the spring of 2003, wherein we received impetus from a team of consultants who joined in compiling our information into a draft along with maps of the county area.

Navajo County Board of Supervisors adopted in January 2000 a public participation procedures ordinance as part of the growing smarter legislation. This directs the staff to involve the public as much as possible in order to obtain their input in such matters. The procedures require:

Transmit the Draft Plan to the Board of Supervisors, each municipality in the County, all counties contiguous to the County, the Northern Arizona Council of Governments, the Arizona Department of Commerce – or any other state agency that is designated as the general planning agency for Arizona, and any person or entity that requests a copy in writing. This transmittal is to be completed at least 60 days before adoption of the Plan.

A 60 day review period during which any interested party may submit written comments on the Plan to the County. During this period, the County must conduct at least one public workshop regarding the Plan to which interested parties and the public will be invited. The invitations are to be extended to persons representing all geographic, ethnic, and economic groups in the County.

Full public hearings before the Planning and Zoning Commission and the Board of Supervisors.



### **3.0 Background Information**

#### **3.1 History**

Navajo County was formed on March 21, 1895, as the final act of the Territorial Assembly before it adjourned at midnight. What is now Navajo County was first included in Yavapai County, but in 1879, the area was added to the newly formed Apache County. By the time it became Navajo County, the area was developed. The railroad had crossed the county for more than a decade and North America's third largest ranch, the Aztec Land and Cattle Company near Holbrook had been established. Holbrook, the county seat, was founded in 1871.

#### **3.2 Population**

Navajo County is home to several incorporated towns and cities and more unincorporated communities. The information below details the populations in the County and in incorporated areas according to the United States Census Bureau, with projected population changes from the Arizona Department of Economic Security ("DES").

The County population has increased steadily in the past three decades and is projected to increase in the next 50 years by almost 50,000 persons, or approximately 50 percent of the County's population in the year 2000. However, given the population increase in the County between 1990 and 2000, it seems that the DES projections are probably low and population could increase much more than 50,000 by the year 2050. The total County population has increased since 1970 as follows:

##### **NAVAJO COUNTY POPULATION**

<b>YEAR</b>	<b>POPULATION</b>
1970	47,715
1980	67,629
1990	77,658
2000	97,470
2050	147,269 (projected)

In 2000, the County population was disbursed as follows:

##### **Population Disbursement, 2000:**

Incorporated Cities and Towns:	34.2%
Unincorporated Area:	20.3%
Indian Reservations:	45.5%

The United States Census shows a population in Navajo County's incorporated cities and towns as follows. The projection for 2050 is from DES. As noted above, the projection is probably low given overall growth between 1990 and 2000 in the County. Thus, the unincorporated area population increase could be between 10,000 to about 20,000 people over 50 years, unless some of the area to be populated by them would be incorporated into a city or town. These people will live some place; hence, this plan takes a look at where they may end up.

City/Town Population	1990	2000	Projected 2050
Holbrook	4,686	4,917	7,951
Pinetop- Lakeside	2,422	3,582	6,064
Show Low	5,019	7,695	13,353
Snowflake	3,679	4,460	6,700
Taylor	2,418	3,176	5,565
Winslow	8,190	9,520	16,319
<b>Total</b>	<b>26,414</b>	<b>33,350</b>	<b>55,952</b>

### 3.3 Physical Setting

The Mogollon Rim divides the County into two distinct regions. The high country in the northern part of the county is arid and desert-like with empty flat-topped mesas, isolated buttes and valleys, and smaller plateaus. The primary vegetation is sagebrush, short grasses, and some juniper and piñon. The Little Colorado River is the key geographic feature of Navajo County. It flows generally west-northwest, from the Apache County border on the east to the Navajo Indian Reservation boundary across the northern portion of the county to the Coconino County border on the west. The southern portion of the county is rugged mountain area, heavily wooded with piñon-juniper and ponderosa pine, with many lakes and streams. Elevations vary from 4,850 feet near Winslow to 7,575 feet at the Mogollon Rim.

### 3.4 Land Ownership/Governance

The vast majority of Navajo County is not in private ownership. Almost 66 percent (66%) of Navajo County's 9,949 square miles is Native American Reservation Land. The US Forest Service ("USFS") and Bureau of Land Management ("BLM") together control 9% of the County; the state of Arizona owns 5.9%. Individual and corporate ownership accounts for only 18% of the County. See Exhibits 1A and 1B.

In areas outside the Reservations and the National Forest, land is held in a "checkerboard" pattern of sections of land. A significant portion of the checkerboard involves state holdings and all of the following: Tribal Land in fee ownership, private land, BLM holdings, and subdivided land, as illustrated on Exhibits 1A and 1B, Existing Conditions. Unlike other Arizona counties, state ownership includes no large blocks of contiguous sections. Two state properties are parks – Homolovi Ruins State Park outside Winslow and Fool Hollow Lake Recreation Area near Show Low. Some private holdings exist within the National Forest and within the Reservations.

The Native American land includes several Reservations – the Navajo, Hopi, and White Mountain Apache. The northernmost incorporated community in Navajo County is Kayenta, which is part of the Navajo Indian Reservation and was founded in 1909 as a trading post; Kayenta now serves as the gateway to Navajo Tribal Park at Monument Valley and a thriving Navajo community. Farther south is the Hopi Indian Reservation that is completely surrounded by the Navajo Reservation. The Hopi Pueblo of Old Oraibi is one of the oldest continuously inhabited settlements in the United States. The White Mountain Apache Indian Reservation is located south of both Show Low and

Pinetop/Lakeside and extends south to the Gila County line and east to the Greenlee County line.

Navajo County contains the following incorporated communities: Holbrook, the County seat, Winslow, Snowflake, Taylor, Show Low, and Pinetop/Lakeside. Several other non-Reservation communities are unincorporated, including Heber, Overgaard, Clay Springs, Shumway, Linden, Cedar Hills, White Mountain Lake, Joseph City, Pinedale, Sun Valley/Adamana, and Woodruff. As noted in Section 1.5, Heber-Overgaard has an area plan and is the only unincorporated community not included in this Plan. The Pinetop-Lakeside/Navajo County Regional Plan also covers some unincorporated territory that is not included in this Plan.

### **3.5 Economy/Industry**

Navajo County's principal industries are tourism, coal mining, manufacturing, timber production and ranching. Other employers include all levels of government, Arizona Public Service's Cholla Power Plant southwest of Joseph City, the Burlington Northern Santa Fe Railway Company, and the Abitibi Consolidated Paper Mill west of Snowflake/Taylor. Economic expansion will be a critical component of growth in the County and will also provide better opportunities for the County's youth to remain in, or return to, the area after finishing their schooling.

### **3.6 Climate**

The climate of Navajo County is classified as semi-arid or sub-humid. This dry climate is a consequence of the low relative humidity and abundant sunshine that are prevalent for much of the year. Relative humidity may fall as low as 10% in June, when the sun shines 80% to 85% of daylight hours. Two or three days of total cloud cover is rare at any time of the year, and five to eight consecutive days without a trace of clouds is a common occurrence during the dry months of May and June.

Typically, 37% to 48% of the total annual precipitation falls within the three-month period from July to September. Often this occurs in the form of monsoons, or torrential thunderstorms.

Along the Little Colorado valley, in the lower elevations, winter snowfall may in rare instances impede traffic movement. In the higher elevations though, snowfall often presents a danger both to the movement of traffic and to the unwary outdoor enthusiast.

Wind velocities of 35 to 50 miles per hour are commonly observed in Winslow (situated in the northern area of the County where relatively flat valleys and mesas have little dampening effect on the wind) during March and April, the windiest months. Even higher velocities have been measured; however, the duration periods are short.

Table 1

CLIMATIC DATA FROM SEVEN COMMUNITIES

Station & Elevation (feet)	Annual Precipitation (inches)	Annual Snowfall (inches)	Frost-free period (days)	Average High Temperature (F)	Average Low Temperature (F)	Average Temperature (F)
Heber (6,600)	17.7	46.6	115	64.9	30.2	47.6
Holbrook (5,069)	8.8	10.6	174	72.1	37.8	55.0
Lakeside (6,700)	22.0	64.4	127	62.4	32.1	47.2
Pinetop (7,500)	21.5	75.7	-	-	-	-
Show Low (6,382)	18.4	52.1	117	65.3	35.6	50.4
Snowflake (5,644)	12.2	20.7	132	69.0	33.4	51.2
Winslow (4,880)	7.8	10.5	173	71.4	38.9	55.2

Source: Soil Survey, Holbrook-Show Low Area, US Dept. of Agriculture

### 3.7 Soils

There are nine basic soil conditions, and associations, in Navajo County. Each of these soil conditions is characteristically found in association with a general set of climatic, topographic and related physical features. As soil conditions and associations are obviously a major influence affecting development potentials, it is important to understand them.

#### 3.7.1 Deep Loamy and Sandy Soils

These soils are mainly members of the Moffat and Sheppard series. Moffat soils are loamy or sandy on the surface, with sandy clay loam subsoil with a distinct lime layer in the lower subsoil. These soils generally develop on gently rolling topography. Sheppard soils are deep and sandy and occur on the broad, high ridges of old dunes. Both of these soil types are found at elevations of 5,000 to 5,700 feet, atop the long narrow mesas that slope sharply down to the eroded shale of the Painted Desert. Vegetation is short-grass, typically, with sparse woody plants and weeds. Forage production is fairly high, although permeability is rapid. The total effect of this soil association limits profitable development.

#### 3.7.2 Shale Badlands

This area consists of dissected sandy, silty and clay-like shale and occurs below the deep sandy loamy mesas of Association #1 (See Map1, Appendix). About 85% of the area is devoid of vegetation and classified as badlands. Because of the polychromatic nature of the eroding Chinle shale, this area is known as the Painted Desert.

The rest of the Association #2 area consists of deep alluvial soils of the Navajo, Jicity and Ives series. These occur on narrow flood plains and fans, forming a shallow soil cover over the shale where surface-water and wind erosion is mitigated by the accumulation of log gravel and other stabilizing matter. All soils

in this association are affected to some degree by the salts and alkali of the parent (underlying) shale. Elevation ranges from 4,500 to 5,500 feet and vegetation, when it manages to grow, is short-grass. Development possibilities on the 85% area devoid of soil and vegetation are extremely limited and quite limited on the deeper alluvial soil-covered areas.

3.7.3 The Flood Plains

Alluvial soils on the flood plains of the Little Colorado River are members of the Jocity, Tours, Navajo, and Ives series. Textures range from clay to loamy fine sand and salinity varies from slight to severe, with slight to moderate alkali. A permanent water table is 6 feet or more below the flood plain's level to gently sloping surface (accumulation of windblown material around clumps of grass and shrubs makes the plain appear hummocky in many places). Vegetation is browse type. Permeability is very slow and almost all cultivation in the county occurs on these soils. Potentials for other developments are limited, however, due to the hazards of periodic flooding.

3.7.4 Shallow Soils on Sandstone and Sandy Shale

These soils consist of the shallow, very shallow, and stony phases of the Moenkopi series and are found on interbedded sandstone and shale of the Moenkopi formation. Scattered through the western and central sections of this soil-association area are outcroppings and low ridges of dense sandstone; here the soil is very shallow. In the eastern sections, shallow soil overlays sand and clay shale. Elevations in this soil-association area are between 5,000 and 5,500 feet, with short-grass vegetation growing on the gently rolling topography. Permeability is rapid to very rapid. Depending upon soil depth, cultivation and development is limited.

3.7.5 Brown Sandy Soils on Sandstone

These soils are generally shallow and often stony. The surface is loam or fine sandy loam and the subsoil is loam and light clay loam. Usually, soils on sandstone are calcareous throughout the profile and this is generally true of Association #5 soils. Certain small parcels, where the soil is on old outwash materials, have non-calcareous clay loam or clay subsoil. About 20% of this association area consists of sandstone outcroppings; these may be partially covered by thin layers of sand or loamy sand. The elevation range is 5,500 to 6,000 feet. Development potentials appear to be limited.

3.7.6 Hilly, Gravelly, Shallow Soils

These soils are found in association with small, rounded hills and sharp breaks over a parent material which is a mixture of old gravelly outwash deposited on shallow sandstone and on silty or clay-like shale. Thickness of the gravelly outwash material now runs from a few inches to several feet. Texture of the surface soil ranges through loam, fine sandy loam and sandy loam to gravelly loam and gravelly sandy loam. The topography, at 5,500 to 6,000 feet, is gently to moderate rolling with 2% to 8% slopes. Vegetation is short-grass and soil permeability is slow. Development of the gently sloping areas is possible.

### 3.7.7 Shale and Sandstone Rock Land

Small buttes, ledges and knolls with active erosion distinguish this association area. More than 70% of the land is barren shale and sandstone rock. The rest consists of very shallow soils of the Moenkopi series, supporting sparse vegetation of the piñon-juniper type. This area has very little development potential.

### 3.7.8 Soil on Basalt and Cinders

In southeastern Navajo County is a 6,000- to 7,500-foot high plateau that is completely covered with basalt flows and cinder cones. Soils are very shallow to deep and textures range from clay to loam with the Springerville and Pajo series dominant. Some outcroppings of basalt are found. Vegetation reflects the differences in soil textures and varies from short-grass to forest. Development is possible and cultivation of the finer-textured soils can be fruitful.

### 3.7.9 Shallow to Deep Soils on the Mogollon Plateau

On the Mogollon Plateau, soil associations differ greatly because of the wide variations in parent material, which progresses from sandstone to shale or limestone to sand and gravel. Some of the plateau's soils belong to the Show Low, Millard, Elledge, Chevelon, Zeniff and Overgaard series. Alluvial soils are of the Heber, Mogollon and Jacques series. Also in evidence are shallow to moderately deep soils of sand or clay loam over limestone, sandstone and shale. Elevations range from 6,000 to 7,000 feet. Vegetation is forest (primarily Ponderosa Pine) and piñon-juniper.

TABLE 2

#### DEVELOPMENT & AGRICULTURAL POTENTIALS OF NAVAJO COUNTY SOILS

Association	Septic	Sewage	Roads	Irrigated Cultivation
1. Deep loamy & sandy soil of the mesa	Moderate to slight	Slight to moderate	Slight to moderate	Slight to moderate, depending on slope & texture
2. Shale badlands	Poor	Poor	Poor to moderate, over soil	Poor, improving to slight when soil is present
3. Flood plains	-	-	-	-
4. Shallow soils on sandstone & sandy shale	Poor	Poor	Poor	Poor
5. Brown sandy soils on sandstone	Poor	Poor	Poor	Poor
6. Hilly, gravelly shallow soils	Moderate to slight	Slight to moderate	Slight to moderate	Slight to moderate, depending on depth, slope, texture
7. Shale & sandstone rock land	Poor	Poor	Poor	Poor
8. Soil on basalt & cinders	Poor	Poor; but moderate on clay	Moderate for loam, poor for clay	Poor, improving to moderate for some loam-soil on cinder areas
9. Shallow to deep soils of the Mogollon Plateau	Poor; but moderate in gravel	Moderate	Moderate for gravel; poor for red clay	Moderate to poor for clay; slight to poor for gravel

### 3.8 Vegetation

#### 3.8.1 Woodland Types

Navajo County supports several woodland vegetation zones. Lower elevation areas with limited precipitation support a Chaparral woodland type with Emory (live) oak, manzanita and a variety of shrubby woodland vegetation. Where precipitation averages between seven and sixteen inches annually the Pinion-Juniper woodland type exists. Mid elevation areas, generally between 6,000 and 8,000 feet, with precipitation averages between sixteen and twenty-four inches annually support the Pine-Oak woodland type. Very limited areas of the upper elevation areas in the Pine-Oak transition into Mixed Conifer-Aspen where precipitation exceeds twenty-six inches annually.

##### 3.8.1.1 Chaparral Woodland:

The Chaparral woodland is very important to various areas of Navajo County due to browse, forbs and grass components it represents. In addition to the larger woodland types, Emory oak (*Quercus emoryi*) and manzanita (*Arctostaphylos manzanita*), there is an understory of numerous small woody shrubs, forbs and grasses. These provide a rich variety of browse and grazing opportunities for wildlife and domestic livestock. Vast areas of the Navajo, Hopi and White Mountain Apache Indian Reservations support this vegetative type. It provides critical economic sustainability in these three communities as well as in the non-tribal areas along the Little Colorado and Puerco Rivers across central Navajo County.

##### 3.8.1.2 Pinion-Juniper (P-J) Woodland:

The Pinion-Juniper (P-J) woodland type is the largest of the major woodland types in Navajo County. Primary woody plant types are pinion pine (*Pinus edulis*), the shaggy bark junipers (one seed, multiple seed, Utah and Rocky Mountain) varieties (*Juniperus monosperma*, *osteosperma*, *utahensis*, and *scapulora*) respectively, and the alligator juniper (*Juniperus deppeana*) which is a transition species along the upper limits of the P-J woodland where it transitions into the Pine-Oak type. The alligator juniper is the only juniper species that is fire adapted. That is, it has adapted to frequent wildfire and propagates from the roots when the vegetative portion is burned. This woodland type is economically critical to all communities in the area and is especially important to the Native American communities as food (pine nuts from pinion pines) and firewood. It supports a wide variety of wildlife providing both food and shelter. In terms of range this woodland type is the largest type and is found in all areas of Navajo County where precipitation is adequate from Utah in the north to the Black River in the south. Overall, the pinion pine and alligator juniper each represent about five percent of the total stems in this woodland type.

This vegetative type, especially the non-fire adapted varieties, has steadily encroached on the short-grass prairie areas across the landscape. It has been greatly aided in this process by several factors. Fire suppression, grazing (especially in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries when massive numbers of livestock were introduced to the area) and a generally wet pattern that persisted throughout much of the 20<sup>th</sup> century. Grasses native to the area include, but are not limited to, alkali sacaton, sand mesa, and tall dropseed, galleta, western

wheatgrass, blue grama, sideoats grama, black grama, prairie threeawn, and mountain muhly, vine mesquite, along with several annual and non native types in niche areas.

#### 3.8.1.3 Pine-Oak (Pippo) Woodland:

The Pine-Oak woodland in Navajo County consists of ponderosa pine (*Pinus ponderosa*) as the dominant species, with significant numbers of gambel oak (*Quercus gambelii*) throughout and considerable numbers of alligator juniper (*J. deppeana*). There are very small areas of imbedded Douglas fir (*Pseudotsuga taxifolia*), quaking aspen (*Populus tremuloides*) and the Chihuahuan pine (*P. chihuahuana*). This woodland type represents a true forest within Navajo County and is located in two widely separated geographic areas. It is found in the high elevation areas of the Black Mesa on the Navajo Reservation where there are between 16,000 and 20,000 acres of this woodland type. In the southern portions of Navajo County there are over 700,000 forested acres of forest in the Pine-Oak type. This represents a portion of the contiguous ponderosa pine forest that extends several hundred miles from central New Mexico to the Grand Canyon in western Arizona. Unfortunately, over 350,000 acres of this forest, in Navajo County, was severely damaged by the 469,000 acre, Rodeo-Chediski Fire in June 2002. Economically, the Pine-Oak woodland is the engine that drives the southern half of Navajo County. It has great value in terms of both extractive material and the amenity it represents for retirement, second home ownership, recreation, wildlife interactions, watershed and tourism to name a portion. It is also a critical component of the year round grazing program for many ranchers, both on and off the Native American Reservations.

The Pine-Oak woodland has degraded extensively due to European settlement of the area in the late 1800's. The impacts of this settlement and the consequent contributions to forest go beyond the issues of livestock grazing and timber extraction. Fire suppression, housing development, water diversions, road building, individual and group recreation, sensitive species protection and general misunderstanding of what the sustainable forest conditions were all contributed to the largely non sustainable and unhealthy forest we have in the Pine-Oak type today. Within this woodland type there are two anomalies that need to be noted. Pine-Oak vegetation will sting out of the higher elevations to as low as 5,500 feet along washes and waterways. In pre historic time these slingers were a critical component of regeneration when the forest expanded following long drought patterns. The other anomaly is a significant invasive component of Douglas fir in the south facing areas of the Mogollon Rim in Pinetop and Lakeside. These trees are unique in this area in that in the mixed conifer they are generally located on north slopes and in areas where precipitation exceeds 30 inches annually.

In the upper elevations where precipitation exceeds 30 inches annually there are limited areas of Douglas fir and aspen. These are located on the traditional north slopes and high precipitation areas of the county. For the most part, both of these species, with the exception noted above concerning the Douglas fir, are almost exclusively found on the White Mountain Apache Reservation at the highest elevations south of Hon Dah. One other hardwood type found in small numbers is the Arizona Black Walnut, located on the White Mountain Apache Reservation just south of Pinetop and Hon Dah. This species has been used very successfully as a landscape plant throughout the area.



#### 3.8.1.4 Grassland:

In those areas where woodland types do not dominate there are expansive areas of grassland in Navajo County. This is a shortgrass prairie grassland and is found in the areas boarding the Puerco and Little Colorado Rivers extending thirty or more miles to both the north and the south. This vegetative type thrives in the low moisture regions where the woodland types are not sustainable. There are a wide variety of grasses throughout this area with blue grama, black grama, cheat grass, six weeks fescue, threeawn, ring muhly, sand dropseed, Indian ricegrass, needle and thread grass, and alkali sacaton as the most important. There is a shrub, or browse, component throughout the area concentrated in draws, washes, sandridges and in areas of saline-alkali soils. Fourwing saltbush, greasewood, white sage (winterfat), shadscale, snakeweed, rabbitbrush and Mormon tea are the dominant woody browse plants in this area. Along stream areas where there is live water, surface or subsurface, typical riparian plant communities exist. Cotton wood, box elder, willow, salt-cedar, are the dominant trees species with a multitude of herbaceous broadleaf plants found across the landscape during the rainy season.

### 3.9 Rodeo-Chediski Fire

Between June 18 and July 7 2002, Navajo County suffered a devastating and defining event – the Rodeo-Chediski Fire. This largest fire in Arizona history burned 467,099 acres – 167,215 acres on the Sitgreaves National Forest, 10,667 acres on the Tonto National Forest, and 289,217 acres on the White Mountain Apache Reservation. After the Rodeo-Chediski Fire, the need to actively manage the Sitgreaves National Forest became even more apparent. The loss of homes, woodland beauty, and tourist drawing power makes the long-term health and sustainability of the forest vital to the growth and development of Navajo County.

Clues were left in the wake of this historically large fire that point to patterns that future fires could possibly repeat. Through understanding these patterns the area can create plans to better manage future fires and protect this most valuable asset, the natural native growth. The pattern suggests that when larger fires start below the Mogollon Rim they tend to burn up canyons toward the Rim. If weather conditions and fuel permit, the speed and intensity of these fires will quickly reach the Mogollon Rim. As they reach the Mogollon Rim, they will most likely become crown fires, as a result of increased fuel availability, and will continue to burn across the top of the Rim, down canyons, particularly in northeasterly directions being driven by the prevailing winds.

Three things proved valuable in controlling and managing a fire of this magnitude. They were the existing population centers, paved roads, and areas previously treated through thinning, prescribed burn, or other methods. When these crown fires entered into areas on private and tribal lands that had been treated, these treated areas reduced the intensity of the fire. In some cases fire intensity maps prepared after the fire suggest that treated areas as small as forty acres may have been able to reduce the highly destructive crown fires to what might be considered healthy ground fires.

The fire crews worked to create defensible boundaries to contain the fire along State Route 60 and State Route 260. These paved roads provided easy access through the forest for fire fighters. The roads' widths served as strong firebreaks and in most instances were successful in containing the fire.

The existing populated areas provided incentive to manage the force of the fire. While many areas had to be evacuated and homes were lost, the existing population centers provided the fire fighting crews the impetus for protecting private property and the financial incentive needed to bring in crews from outside the area to assist in fighting the fire.

Navajo County believes these same three elements (populated areas, paved roads, and treated areas) could be used to manage the patterns and intensities of future fires. Actively treated and/or open recreation areas should be strategically placed and maintained throughout the forest. There are two topographic conditions where pre-determining the type and amount of existing vegetation in an area would have the strongest ability to manage the fire. The first are locations where two canyons merge together and the second are areas where canyons below the Mogollon Rim direct fire to breach the Rim and continue with renewed force on top. These actively treated and/or recreation areas should also be placed to catch fires driven by the northeasterly winds once on top of the Mogollon Rim. The Mogollon Rim Road and several of the forest roads connecting the Mogollon Rim Road and State Route 260 should be paved to allow broader firebreak areas. The improved access to the forest and additional defensible firebreaks would add to the ability to contain future fires.

The existing population centers (townships and other such communities) should be allowed to actively treat and thin a defensible area one mile outside each populated area or to the White Mountain Apache Tribal boundary. The intent of this thinning and treating is not to remove all trees from the area, but rather to protect the recreational value of the communities. These communities should be encouraged to develop and grow so that they have the financial resources to protect their assets from fire damage.

In addition to these three major controlling elements, a healthy management plan of the greater forest should be maintained. Professional treatment could not only add to the health of the forest by eliminating excess fuel, it could provide forest related jobs for the economy of the area.

The improvements to the roads, additions of treated or recreation areas, and the continued development of the existing population centers along with a healthy management plan for the greater forest area, will help protect the forest from destructive fires as well as protect the area's recreational and tourism industry.

## **4.0 Land Use Element**

### **4.1 Introduction**

The Land Use Element is, by far, the most important element of the Navajo County Comprehensive Plan. Proper land use planning is critical to provide for an orderly and efficient transition of vacant, rural, or redevelopable land to urban land use.

This Comprehensive Plan recommends increased use of two land planning and development tools already in existence in the Navajo County Zoning Ordinance – development standards, as in the Subdivision Regulations & Requirements, and Special Development zoning, as discussed below. Land planning and development tools can address pressures and concerns that may be raised when new residents move into an area to protect individual property rights and property values. The tools can help ensure continued stewardship of the land so new development will respect the traditions and customs of long time residents.

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One important concept or tool is the use of development standards. Navajo County already has such standards in its Zoning Ordinance and Subdivision Regulations & Requirements, and has also used conditions or stipulations on rezoning approvals. The standards can help to limit impacts between different uses of land, such as between commercial and residential development. The development standards may include items such as noise limits, building setback requirements from property lines or adjacent development, screening requirements using walls or landscape materials to provide a visual buffer between land uses, landscaping requirements to ensure provision of trees in parking lots and next to streets and highways, paving requirements for access from a highway to a lot or development, standards for sizes of signs, etc. The development standards are intended to help neighboring land uses coexist with minimal intrusion on each other – again to preserve private property rights and property values. Development standards may also include trade-offs or incentives that allow a land owner to have a use that could have impacts on the surrounding area so long as the owner will provide specified tools (such as additional landscaping, limited hours of operation) to address those impacts. Other considerations of air quality and access to incident solar and wind energy may be included in the standards.

Another important concept is use of the Special Development zone to help ensure that future complex development minimizes its impacts on the quality of life and character of the area. With special development zoning a developer, or owner of a large tract of land, prepares a plan for the property discussing mixed land uses, the number of dwelling units, the types and intensities of commercial and industrial development, parcel sizes, open space, preservation of natural features; and provision of infrastructure (such as water, sewer and paved roads) and services (such as garbage collection and fire protection), to ensure that the new residents and businesses will be properly served without significantly impacting people already in the vicinity.

In particular, a Special Development plan could address in written or graphic format if and how the following elements may be provided for future residents or landowners and in what condition. (Most elements are already incorporated in the Zoning Ordinance and are reviewed for recording plats)

Proposed land uses (i.e. Residential, Rural, Commercial, Industrial, Agricultural, Open Space)

Proposed densities, maximum number of dwelling units and or the maximum square feet of commercial/industrial uses

The general size of the parcels intended for each use

Automotive circulation including road condition (paved/unpaved), and general width of right-of-ways and how it will address adjacent properties

Pedestrian / equestrian circulation including width, facilities and paving condition, if any

Alternative circulation including width, facilities and paving condition (i.e. golf carts, quads, motorcross bikes, bicycles, buses), if any

Amount and type of dedicated open space (i.e. natural, developed parks, ball fields, golf courses), if any

Identification of natural or historic features in the community (i.e. unique landforms, archeology, historic buildings), if any

Method of dealing with natural watercourses through the community

Method of dealing with mass grading of the community

Defenses against fire (in forested areas) (i.e. firebreaks, active thinning areas)

Sewer/Septic

Water

Natural Gas/Propane

Electricity  
Phone / Communications  
Fire coverage

The character areas established in the Land Use Element are broad, allow a wide range of uses, and are tied to most zoning districts. The vision of the Element is the protection of existing community character that maximizes balanced economic development. The Plan suggests accomplishing this vision by mitigating potential impacts of mixed land uses with setbacks, screening, landscaping and other enhanced performance standards and clarifying how to be a good neighbor by establishing expectations up front. The character areas differ primarily in the character of the land and community, such as being surrounded by national forest and pine trees, located along the interstate highway, part of range land that has traditionally been used for ranching or agriculture, etc. As development and growth occur in Navajo County, the Comprehensive Plan and the Land Use Element will evolve. With each update of the Comprehensive Plan, the land uses appropriate in each character area should be reviewed, with the intent of more clearly defining appropriate uses, services, and aesthetic characteristics of each character area. A part of this review could be the elimination of some land uses from, and/or addition of some land uses to, some character areas. The Land Use Element in the Comprehensive Plan is intended to set the stage for the initial development and growth that will establish a framework for future planning decisions that can be responsive to the diverse character of the landscape and communities within the County.

#### 4.2 Zoning

Navajo County has adopted the Zoning Ordinance as authorized by Statute. (A.R.S. § 11-802) The Zoning Ordinance includes zoning districts for classes of residential, rural, commercial, industrial, and special development uses. The districts establish development standards, including required yards/setbacks, height limits, minimum parcel area and dimension, and maximum parcel coverage to ensure provision of light and air quality for all development in Navajo County; the districts also include parking standards to expedite traffic flow.

A property owner can process a split of their parcel in accordance with state statutes within the already established county zoning classification for the parcel. For example, a property owner of 20 acres in a Rural -1 zone can split the parcel by meeting all of the current state requirements. This Plan would have no effect on this action. Only when the owner desires to do a "development," as defined in Section 1.2, would they be required to do a proper submittal for a subdivision and possibly a master plan.

Some revisions of the Zoning Ordinance may be necessary to implement this Comprehensive Plan. Chief among these changes may be the addition of a new commercial district to supplement the existing C-R/ Commercial Residential District.

Nothing in this element should be construed to affect minor land divisions i.e. parcel splits that meet state statutes, or to impede the standards allowed under current zoning district designations, or technical requirements of the Subdivision Regulations & Requirements.

#### 4.3 Area Plans

This Comprehensive Plan includes three Area Plans as follows:

- Heber-Overgaard
- Pinetop-Lakeside/Navajo County Regional Plan

• Aztec Area Plan

Each of the Area Plans lists the proposed land uses for that given Area Plan, which may or may not correspond to the land uses listed below.

**4.4 Character Areas and Overlay**

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This Comprehensive Plan includes eight character areas for Navajo County, discussed below. The designations detail the types of land uses envisioned for different parts of the County. As noted above, the Plan assigns no character area to: 1) the land currently covered in an adopted Municipal General Plan for the cities and towns, 2) an adopted area plan in the unincorporated area of the county, or 3) to a Native American Reservation. Each of the character area description lists the permitted zoning districts for the designation to help Navajo County decision-makers implement the Plan. The Zoning Ordinance lists permitted land uses and other regulations for each zoning district. Although this Plan does not include that level of specific information, it does suggest some specific potential regulations that the County could use to implement the goals of each character area. The character areas are not to be read as regulatory.

**4.4.1 Rural Ranch**

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The purpose of the Rural Ranch character area is to preserve the open character of land traditionally used for ranching in Navajo County. A significant amount of the land designated as Rural Ranch has been divided into 36 or 40 acre parcels.

Rural Ranch may include both low density residential and limited commercial uses focused on adjacent highways. Commercial uses in Rural Ranch should be allowed only along paved access or rights-of-way and are encouraged at highway intersections. Any industrial or storage uses in Rural Ranch should be screened from views from rights-of-way.

A "development" may occur in any zoning district within the character area, provided it complies with the subdivision regulations. All zoning districts may be applied for within this character area via a zone change request.

**4.4.2 Range Land**

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The purpose of the Range Land character area is to allow cattle ranching, farming, and other traditional Navajo County agricultural uses. The character area is designated for lands that are large private tracts or other property that is, and likely will continue to be, used for ranching purposes.

A "development" may occur in any zoning district within the character area, provided it complies with the subdivision regulations. All zoning districts may be applied for within this character area via a zone change request.

For example, a landowner Rural Ranch and in A-General Zoning desires to do a "subdivision." He could process a plat OR, he could also proceed to do a parcel split following state statutes and the Navajo County Zoning Ordinance and not come under the plan.

#### 4.4.3 Rural Edge

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The purpose of the Rural Edge character area is to provide lower density residential development adjacent to Community Village. The character area is typically designated for property adjacent to existing or planned areas of higher density and for property generally within two miles of a highway, Projected Future Routes, or other significant roads in the area.

A development may occur in any zoning district within the character area, provided it complies with the subdivision regulations. All zoning districts may be applied for within this character area via a zone change request.

Rural Edge may include both low-to-medium density residential and limited commercial uses. Commercial uses in Rural Edge should be allowed only along paved access or rights-of-way and are encouraged at highway intersections. Any industrial or storage uses in Rural Edge should be screened from views from the rights-of-way.

For example, a landowner in Rural Edge may have a zoning designation of A-General, RU-5 or RU-1, etc. They could split the parcel according to state statutes and the Zoning Ordinance and this plan would have no affect, or develop a "subdivision" in compliance with the subdivision regulations.

#### 4.4.4 Community Village

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The purpose of the Community Village character area is to provide large areas with higher density residential development with a mix of related commercial, industrial and institutional uses extending from highway corridors and highway intersections. Community Village is an appropriate and encouraged location for uses such as community college campuses and hospitals or medical clinics.

All "subdivision" development in Community Village should have paved access. Residential "subdivision" development has no maximum or minimum density requirement. The development list, described in Section 4.1, should mitigate impacts of the uses on established development and provide relief between residential and nonresidential uses. Industrial and storage uses should be screened from views from all rights-of-way and should have a setback of at least that required for the zone adjacent to non-industrial land uses.

Community Village is most appropriate adjacent to existing communities or as part of a local area community master plan. Community Village could either be 1) annexed to an incorporated municipality and developed in conformance with the municipality's regulations, or 2) developed subject to a this plan and the subdivision regulations & requirements.

#### 4.4.5 Highway Service

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The purpose of the Highway Service character area is to provide transportation-oriented commercial development nodes along the interstate highway system and other highway-oriented development. In addition to transportation related businesses such as distribution centers and trucking terminals, Highway Service land uses will provide services to the traveling public, including long haul truckers and vacationers.

Access to Highway Service should be paved and should accommodate the turning radii of semi-tractor trailers for commercial development. The diameter of the commercial nodes should be between one and two miles, as indicated on the Comprehensive Plan Land Use Map, described in Section 4.4. Residential development in Highway Service should be part of a mixed-use development with commercial uses, if located closer than one-half mile to a freeway interchange. Any stand alone residential "development" could be approved with the development list as described in Section 4.1, and augmented on how the development accommodates large trucks and paving, open space, preservation of natural features, provision of water, sewer, sanitation, and other public services, and location of residential and nonresidential uses.

#### 4.4.6 Recreation

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The purpose of the Recreation character area is to provide for monitored growth, particularly of vacation and recreation oriented uses, on properties surrounded by and adjacent to National Forest land. If National Forest land is transferred to private ownership, the Recreation character area is the most appropriate designation.

Uses in Recreation could include guest lodgings in resorts, hotels, or bed and breakfast facilities, restaurants, and other tourist-oriented commercial uses, and residential uses, especially second homes and staff-related housing. Use of the development list, described in Section 4.1, that provide incentives for development that is sensitive to the forest would help soften impacts of the uses on the forest. All development should either 1) have or plant at least eight native trees per acre throughout the site as a visual buffer, or 2) provide and maintain natural meadows. However, all development in Recreation should be "fire-safe". Development should limit the amount of contiguous pavement to blend with the forest. Colors and lighting should be muted and fit the context of the forest. Billboards should be prohibited. On-premise signage should be low scale and unobtrusive while delivering the intended message. Residential subdivisions should have paved or other appropriately surfaced access from a highway to the parcel. All intense commercial uses should have paved or other appropriately surfaced access from the highway. No development in Recreation should exceed 30 feet in height, except mechanical towers, chimneys, smokestacks, communication towers, or observation towers, etc. as allowed within the framework of the Zoning Ordinance. All development should use natural materials that blend with the colors and textures of the forest.

All Navajo County zoning districts are appropriate in the Recreation Character Area.

#### 4.4.7 Environmentally Sensitive Development Area

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The purpose of the Environmentally Sensitive Development Area ("ESDA") character area is to provide for limited growth of a full range of development/land uses on environmentally sensitive lands, such as property adjacent to the Petrified Forest National Park, the Petrified Forest National Park Overlay character area, and the Homolovi Ruins State Park – the publicly owned and specially designated properties set aside for their scenic, historic, and/or recreational value. Appropriate land uses could include vacation and recreation oriented uses and other uses that are designed to have limited visual or other impacts on the scenic value to surrounding property. The character area does

not address properties in or adjacent to the National Forest. Existing land uses adjacent to the parks include ranching and scattered residential development, neither of which conflicts significantly with public enjoyment of the parks. However, additional safeguards are appropriate to ensure continued protection of the parks and their resources without placing unreasonable barriers on future adjacent development.

Permitted uses "for development" in ESDA should be approved with the development list as discussed in Section 4.1, that addresses paving of roads, open space, preservation of natural features, provision of water, sewer, sanitation, and other public services, and location of residential and nonresidential uses. Low intensity uses, such as restaurants, gift shops, and other similar quiet, indoor or outdoor uses, could serve as protection against theft and other abuse of the parks and their resources by establishing "eyes" on the edge of the park areas. Development standards should provide incentives for development that is sensitive to the surrounding area to help soften impacts of the uses on the parks. All "development" on properties in ESDA should provide visual buffers from the surrounding area. Colors and lighting should be muted and fit the context of the surrounding area. Billboards should be prohibited. On-premise signage should be low scale and unobtrusive while delivering the intended message. Residential "subdivisions" should have paved or other appropriately surfaced access from a highway to the parcel. All intense commercial uses should have paved or other appropriately surfaced access from the highway. No development in ESDA should exceed 30 feet in height above natural grade, except 1) mechanical towers, chimneys, smokestacks, communication towers, or similar unoccupied towers, 2) observation towers, or 3) development for which the design accents or complements a natural slope with a greater overall height, such as a building that is designed to follow such slope. All development should use natural materials that blend with the colors and textures of the surrounding area.

All Navajo County zoning districts, except industrial districts and any intense commercial districts are appropriate in ESDA.

#### 4.4.8 Petrified Forest National Park Overlay

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The purpose of the Petrified Forest National Park Overlay ("PFNPO") is to recognize the area into which the Petrified Forest National Park may expand and the sensitivity that development in this area, which is on the fringe of the Park, should have to the Park. The National Park and the Painted Desert cover approximately 94,189 acres, a small portion of which is in Navajo County. In order to protect the resources of the Park, it is possible that the Park will be extended into the PFNPO area sometime in the near future.

The PFNPO is not a character area; the overlay is used in combination with the Comprehensive Plan's character areas. An overlay would allow everything permitted in the area with which it is combined, except as modified in the overlay; if an overlay specifically prohibits something allowed in the underlying, or combined, character area, the overlay should take precedence and control the land. The PFNPO should allow most of the range of uses from the character area with which it is combined so long as the development list generally described in Section 4.1 is satisfied. The encouraged uses in the designation should be tourist-oriented, including motels and other temporary lodging, shops,



and restaurants. Industrial and more intense commercial uses, such as those that produce significant noise, dust, or odor, should be prohibited.

All "development" in PFNPO should be approved with the development list discussed in Section 4.1 that addresses paving of roads, open space, preservation of natural features, provision of water, sewer, sanitation, and other public services, and location of residential and nonresidential uses. These standards should provide incentives for development that is sensitive to the Park to help soften impacts of the uses on the Park. All development on properties in PFNPO should provide visual buffers from the Park. Colors and lighting should be muted and fit the context of the Park. Billboards should be prohibited. On-premise signage should be low scale and unobtrusive while delivering the intended message. All intense commercial uses should have paved or other appropriately surfaced access from the highway. No development in PFNPO should exceed 30 feet in height above natural grade, except 1) mechanical towers, chimneys, smokestacks, communication towers, or similar unoccupied towers, 2) observation towers, or 3) development for which the design accents or complements a natural slope with a greater overall height, such as a building that is designed to follow such slope. All development should use natural materials that blend with the colors and textures of the Park.

All Navajo County zoning districts, except industrial districts and any intense commercial districts are appropriate in PFNPO. This overlay is depicted on the Comprehensive Plan Land Use Map as a hatched area over the character area with which it is being combined. Although uses from the other designation should be allowed, the Overlay performance standards should control. The County will work with the Park to design an informal review process to provide the Park an opportunity to comment on development plans for property adjacent to its boundaries.

#### 4.4 Land Use Map

The Comprehensive Plan Land Use ("CPLU") Map graphically represents proposed Area Plans and character areas for Navajo County. A small version of the CPLU Map is shown on Exhibit 2. The official CPLU Map is maintained in a larger format and is incorporated into this Plan by reference.

To properly administer the CPLU Map, several things must be kept in mind. The first is that the CPLU Map is dynamic. The current projections for land needs are based on past and present trends, and assumptions about the future. However, community needs and priorities tend to change over time, so amendments to the CPLU Map must be possible.

The second is that the CPLU Map is "general". The character areas on the CPLU Map are not intended to follow property lines and are not zoning districts. Interfaces between different designations are purposefully non-site-specific so as to discourage using CPLU Map designations as the sole basis for making decisions on zone change applications.

As noted above, the Plan assigns no character area to the land currently covered in an adopted Municipal General Plan, Local area plan or to property currently on a Native American Reservation. The Local Area plans address development in their boundaries and are incorporated into this Comprehensive Plan by reference.

#### 4.5 Growth Areas

Arizona Growing Smarter legislation requires counties with a population over 200,000 persons to include in their comprehensive plans a section on planning for growth areas. The growth section is to identify the areas, if any, that are particularly suitable for planned multi-modal transportation and infrastructure expansion and improvements designed to support a planned concentration of a variety of uses. Navajo County's population is just over 100,000. However, planning for growth is important for Navajo County to ensure economical expansion of infrastructure, improve transportation circulation, conserve significant natural resources and open spaces, and provide a rational pattern of land development.

Infill development will probably accommodate most growth in Navajo County in the near term via parcel splits that meet state requirements. Such development involves developing vacant land in or adjacent to established neighborhoods and communities. In Navajo County, this growth could occur adjacent to incorporated communities. Development is expected on private property before it is necessary to develop state or federal lands.

Over time, growth is expected extending from the current transportation corridors and on blocks of private land that have not been divided by following the Arizona Statute or a possible Navajo County Minor Land Division Ordinance.

Approximately 16 percent of the land in Navajo County is publicly owned – approximately ten percent by the federal government and approximately six percent by the state government. Two-thirds of the County is in Indian Reservations. The balance of the land is privately owned. This Comprehensive Plan addresses possible growth on private property and on federal or state land. Issues with publicly held land are discussed below.

##### 4.5.1 State Land

The state holds land in trust for disposition or lease to generate revenue for its beneficiaries, including the public school system. The majority of state lands in Navajo County are used for grazing, state parks, and recreation. The state has an active program of disposition through sale or lease for development in urban areas; the program is less active in rural areas.

The Growing Smarter legislation requires that counties confer with the Arizona State Land Department ("ASLD") to ensure coordinated planning in the county. (A.R.S. § 11-806.G) ASLD is required to develop draft conceptual land use plans for all state trust lands. However, ASLD does not intend to develop conceptual plans for rural areas in the near term and does not plan to begin an active disposition program in such areas. Navajo County encourages such planning in or adjacent to the Community Village and Recreation character areas to ensure appropriate use and development of those lands.

Some state lands in Navajo County are likely locations for growth in the long term, due to their proximity to current transportation corridors or projected future routes. A portion of this land is in checkerboard ownership. Disposition of this land would be critical to long term growth, especially for the Highway Service and Community Village character areas. It will be necessary to work with ASLD at the appropriate time for the disposition.

The Growing Smarter legislation established a program to conserve some of the state trust land. (A.R.S. § 37-312) Under this program, a county may nominate state trust land for classification as "suitable for conservation" if it has significant environmental or open space value. While the land has this temporary classification, a municipality, county, or other group must raise funds to purchase the land for conservation purposes. Such classification could be appropriate for some state trust land in Navajo County, such as that in the Petrified Forest National Park Overlay, and could impact growth.

#### 4.5.2 Federal Land

Federal lands owned by the United States Forest Service and the Bureau of Land Management can be exchanged for private lands. Many private inholdings within the national forests have been exchanged for federal forest land in or near developing communities to allow private development near such communities and to improve the integrity of the forest through consolidation of federal holdings. The land exchange process can be an effective growth management tool as it can 1) facilitate development near existing communities with infrastructure that is available or can be extended and 2) discourage development in remote or environmentally sensitive areas. This process makes available for development land in appropriate locations while adding protection to important habitat. An owner of private inholdings in a national forest initiates the exchange process. The federal agency with which land would be exchanged must complete an environmental assessment of the land. If an exchange occurs, it must be based on equal fair market value.

#### 4.6 **Cost of Development**

Planning to address the cost of development is important in Navajo County given its limited resources; it is critical that new development pay its own way. As noted above, Arizona's Growing Smarter legislation requires counties with a population over 200,000 persons to include in their comprehensive plans a section on the cost of development. Although Navajo County's population is just over 100,000, the County determined that including a framework for programs to help cover the cost of development is advisable. This cost of development section identifies policies and strategies that the County could use to require that development pay its fair share toward the cost of additional public facility needs generated by new development.

To date, developers in Navajo County have been and will continue to be, responsible to pay for on-site infrastructure and those off-site improvements necessary for the project, such as roadway improvements. Several funding mechanisms are available to fund infrastructure improvements, including special districts for roadway improvements.

Arizona gives counties the ability to assess development fees on new development. (A.R.S. § 11-1102) To take advantage of a development fee program, a county must adopt a capital improvements plan; it may then assess development fees within the development fee planning area to offset capital costs for water, sewer, streets, parks, and public safety facilities that the plan indicates are necessary for county public services for development in the area. Development fees must: 1) result in a beneficial use to the development that is being assessed; 2) be placed in a segregated account to be used only for authorized purposes; 3) be credited for facilities covered by the development fee if the developer dedicates such facilities; 4) bear a reasonable relationship to the burden of capital costs resulting from the need for public services for the development; and 5) be assessed in a nondiscriminatory manner. The fees are typically assessed at the time a

building permit is issued. For residential development, the Statute requires the payment to be made when a building permit is issued.

In rural areas with very low-density development, administration of a development fee program is difficult. Given the small number of permits issued in such an area, little money is collected and the contribution to capital projects is also small; a fee that is proportionate to the benefit of the improvement to the area would often be exorbitant. It is possible that assessment of development fees would be practical in growth areas or planned communities.

#### **4.7 Goals and Policies**

##### **Goal 1: To maintain and update the Land Use Element of the Navajo County Comprehensive Plan**

Policy 1-A: Review the Land Use Element of the Navajo County Comprehensive Plan at least every five years, and amend the Plan whenever it is determined that a change is warranted.

Policy 1-B: As growth occurs in Navajo County, revise the Land Use Element, considering addition of greater definition and precision to guide development in the County.

Policy 1-C: Improve technology for Navajo County staff to manage and coordinate growth and development and to update planning and zoning documents.

Policy 1-D: Develop a program for amendments, including Major Amendments, of the Comprehensive Plan. Amendments filed by the private sector should be subject to payment of a processing fee.

##### **Goal 2: To administer the Land Use Element of the Navajo County Comprehensive Plan so as to further the purposes of the Plan.**

Policy 2-A: Approve zone changes that are consistent with the Land Use Element's character areas, as shown on the Land Use Map. However, the Land Use Element and Map shall not be used as the sole justification for making decisions on zone changes.

Policy 2-B: When interpreting character area boundaries, due to the general and non-site specific nature of the Land Use Map, the Planning & Zoning Commission shall consider the character of surrounding uses, past interpretations, and applicable goals and policies of the Comprehensive Plan.

Policy 2-C: Revise the Navajo County Zoning Ordinance, as desired and necessary, to support newer aspects of this Comprehensive Plan, including possible addition of new and different commercial districts, revision of development standards to mitigate impacts between uses, etc.

##### **Goal 3: To preserve and protect archaeological and historic resources for their aesthetic, scientific, educational, and cultural value.**

Policy 3-A: Where probable cause for discovery of cultural or archaeological resources exists, encourage property owner(s) to contact the Arizona State Historic Preservation Office.

Policy 3-B: Propose an informal review process for the Petrified Forest National Park and the Homolovi Ruins State Park to comment on development proposed for property adjacent to the parks.

**Goal 4: To provide equal opportunity for safe, decent, sanitary, and affordable housing for all residents of the County, regardless of race, color, religion, mental or physical disability, sex, sexual orientation, marital or family status, or national origin, in conformance with the Federal Fair Housing Act of 1988 and the Americans with Disabilities Act of 1990 and to provide a range of residential uses that offer housing opportunities for all County residents.**

Policy 4-A: The County's approval standards, special conditions, and procedures regulating development shall be clear and objective and shall not have the effect of discouraging needed housing through unreasonable cost or delay.

Policy 4-B: To promote greater flexibility and economy of land use, provide opportunities in the Zoning Ordinance for alternative housing types and patterns, planned developments, mixed uses, and other innovations that reduce development costs.

Policy 4-C: Encourage new construction methods and housing types in order to increase the housing supply for all socioeconomic groups.

Policy 4-D: Consider developing standards for development density that reflect the needs and goals of existing communities, whether incorporated or unincorporated, such as establishing medium to high density residential zoning for Community Villages and Rural Edge areas and low to medium density for developing rural areas.

Policy 4-E: Continue encouraging development of alternative sewer systems, such as mounds, package plants, peat moss containment, and other similar systems that provide an alternative to traditional sewer and septic systems.

**Goal 5: Improve the overall appearance of the County.**

Policy 5-A: Maintain natural scenic qualities of the County by identifying and protecting cultural resources; protecting wildlife habitat; natural plant communities and riparian areas; and encouraging protection of scenic vistas.

Policy 5-B: Consider adoption of a minor land division ordinance in accordance with Arizona Statutes (A.R.S. § 11-809).

Policy 5-C: Develop a program to educate Navajo County residents and property owners regarding property maintenance requirements and increase enforcement to encourage residents and owners to maintain their properties in a manner that meets code requirements and is aesthetically pleasing.

**Goal 6: Maintain compatible land use patterns while encouraging free market development.**

Policy 6-A: Encourage the use of, and provide incentives (such as density bonuses) for, implementation of community master plans.

Policy 6-B: Consider, if needed, providing for buffers between different land uses including, but not limited to, setbacks, walls or fences, and landscaping.

Policy 6-C: Require paved or other appropriately surfaced access to commercial and industrial uses.

**Goal 7: Facilitate commercial and industrial development, including business and technology uses, where appropriate to increase the sales tax and employment opportunities.**

Policy 7-A: Encourage strategic placement of commercial development so as to attract and locate shopping and employment uses that have paved or other appropriately surfaced access and are easily accessible, particularly in or near established communities and cities, and in communities with air and/or rail access.

Policy 7-B: Encourage the development of non-resource specific industrial uses along major roadways, rail heads, and airports and the development of resource specific industrial uses in appropriate remote locations.

Policy 7-C: Encourage small, specialty enterprises that support recreation and tourist activities near the National Forest, the Petrified Forest National Park, the Homolovi Ruins State Park, and the Native American Reservations.

Policy 7-D: Plan for economic development to improve the business environment in the County and encourage young residents to remain in the County as they mature and enter the workforce.

**Goal 8: Reduce the danger from fire for all residents living in a wildland urban interface or near a National Forest boundary.**

Policy 8-A: Encourage developers and owners to incorporate fire safe development standards including defensible spaces and construction materials.

Policy 8-B: Encourage adoption of the Urban Wildland Interface Code (2000 Edition), which addresses creation of defensible spaces, by local Fire Districts.

Policy 8-C: Discourage high-density development in areas where fire protection and other emergency services are not readily available.

Policy 8-D: Continue to require multiple access routes into new large subdivisions and other major developments for emergency purposes and to improve traffic circulation pursuant to the Subdivision Regulations & Requirements.

Policy 8-E: Continue the review by the Fire Districts in the approval of subdivisions and development projects within their respective jurisdictions.

Policy 8-F: Encourage the implementation of fire prevention education programs.

Policy 8-G: Encourage use of fire defensible building materials, such as metal roofs, alternative siding designed to resemble wood, and other alternative, fire-resistant materials.

Policy 8-H: Encourage adoption of a Community Fire Plan.

**Goal 9: Actively plan to accommodate growth in Navajo County in an appropriate manner.**

Policy 9-A: Consider adoption of development fees to cover costs associated with new development as allowed by statute.

Policy 9-B: Encourage higher density and intensity development in those areas of the County where services, including but not limited to water and sewer systems, paved rights-of-way, and schools, are available or can be created with new development.

Policy 9-C: Encourage conserving agricultural land and open space through density transfers or other programs.

Policy 9-D: Encourage in-fill opportunities in the County to capitalize on existing infrastructure and reduce some growth related costs.

Policy 9-E: Encourage municipalities, sewer companies, water companies, telephone companies, and electricity companies to adopt five and ten year phasing plans for the expansion of public facilities and development in their service areas.

Policy 9-F: Encourage development/installation of technology improvements including, but not limited to, high speed Internet lines and other communications improvements in Navajo County.

Policy 9-G: Coordinate planning efforts with Apache County and the Native American Reservations in Navajo County to improve regional competitiveness for development and uses in the County.

**5.0 Circulation Element**

**5.1 Introduction**

As growth and development occur in Navajo County, enhancements to its circulation system will be necessary. With time, more roads will be paved and air and rail service will improve. The changes to the system will provide better connections from the southern end of the County to Interstate 40 and the communities along the Interstate. New roadways will also improve access from the eastern portions of the County, and Arizona, to the Phoenix metropolitan area. Expansion of air and rail service will improve connections of the County to the region and the nation. The purposes of the Circulation Element is to respond to new growth, and to: 1) provide safe, adequate roadway capacity to meet circulation and access needs; 2) maintain and improve the airport and rail services as viable inter-regional transportation linkages; and 3) direct growth to areas with existing or Projected Future Routes. This Element is based in part on the relationship between land use and circulation to direct both land use development and circulation infrastructure improvements.

This Element includes a brief description of existing circulation infrastructure and goals and policies to help guide improvements to the system as growth and development occur in Navajo County. To date, roadways in the County have been constructed where needs have arisen rather than being installed in anticipation of growth. This approach will probably remain, given limited resources to make improvements. Although this Comprehensive Plan projects or estimates locations for new elements of the circulation system, the timing of making these improvements will be determined largely by needs from new development.

The Northern Arizona Council of Governments ("NACOG"), a nonprofit membership corporation that represents local governments including Navajo County with a variety of services, helps plan and improve the circulation system in the County. NACOG distributes federal circulation planning and construction funds to local agencies in the County and examines circulation planning from a regional perspective. Continued contact and work with NACOG will be critical to ensure implementation of this Element.

## 5.2 Existing Circulation Issues

Circulation planning in Navajo County is challenging given the size of the area, its limited population, and the presence of large ranching tracts, extensive forest lands, large parcels of publicly owned property, and large Native American Reservations. The dominant mode of travel in the County is vehicular; the trips occur on both paved and unpaved roadways. Rail and airport facilities exist in the County to connect the area to the region and nation. All of these methods of transportation serve residents, tourists, and industry.

The circulation system in the County is inadequate in some outlying areas to accommodate long term growth. Although some roads carry vehicular traffic east-west and north-south, large portions of the County are not easily accessible and are, at best, served by privately owned/ maintained roads. The County cannot improve or maintain private roads. Many of the existing paved roads are narrow and two-lane, which limits their carrying capacity. Some of the roads that appear to be paved are only cold mix asphalt with chip seal without a roadway bed or foundation needed for long term stability. Additional and/or improved roads will be needed to serve safely and adequately the land uses proposed in this Comprehensive Plan. The road system and the land uses depend on each other as they evolve-- as development occurs, more roads will be necessary and as more roads are provided, growth will occur along them. The adopted "Southern Navajo/Apache County Sub Regional Transportation Plan" and the "Navajo County Central Area Transportation Study" shall serve as a guide for the future framework for roadways and the circulation system in Navajo County.

Navajo County contains several airports that can provide the framework for enhanced opportunities for air connections to and from the County. The Burlington Northern Santa Fe railroad lines near Interstate 40 connect the County to the region and nation for east-west traffic; a spur line allows limited rail service south of Holbrook. Although not extensive, these rail lines can also assist in expansion of rail service in the County.

The existing circulation system, which is illustrated in Exhibit 3, includes the elements listed below. The roadways depicted on Exhibit 3 are those that the County and its residents deem to be of major importance for current circulation; it does not include all roadways in the County.

Federal Interstate 40.

U.S. Highways 60, 160, 163, and 180.

State Highways, including State Routes 61, 73, 77, 87, 98, 99, 260, 264, 277, 377, and 564.

County Paved Roadways, which are paved and maintained, covering 200 miles.

County Maintained Roadways which are non-paved and maintained, covering 500 miles.



County Primitive Roadways, which are non-paved and not regularly maintained, covering many additional miles. The County must place signage along such primitive roads to warn the public that they use the roads at their own risk.

Forest Service Roadways, which are non-paved and not regularly maintained, through the National Forest.

Winslow-Lindberg Regional Airport, Holbrook Municipal Airport, Taylor Municipal Airport, and Show Low Regional Airport. Private airstrips, such as Mogollon Airpark, are not shown on the map.

The Burlington Northern Santa Fe Railroad line, which carries both freight and passenger traffic – the latter with twice daily stops of Amtrak's Southwest Chief in Winslow.

A railroad line between Holbrook and Snowflake with a branch towards Heber.

The many miles of private roads that are in Navajo County are shown on Exhibit 4 as minor roads for reference only. Although the roads are an important part of the circulation system for limited portions of the County's population; the County has not attempted to map them given the absence of public responsibility for the roads.

### 5.3 Projected Circulation System Improvements

To address the deficiencies in the existing circulation system, this Comprehensive Plan projects several possible additions or expansions to the system. These changes are shown on Exhibit 4 and include the elements discussed below. All existing roads are not shown on Exhibit 4 as its focus is on the roads for which a major role in the circulation system is anticipated as development and growth evolve in Navajo County. Exhibit 4 also includes the recommendations for roadways as noted in the adopted "Southern Navajo/Apache County Sub Regional Transportation Plan" and the "Navajo County Central Area Transportation Study", which serve as guides for the future framework for roadways and circulation system in Navajo County.

The roadway designations (Federal Interstate, Federal/State Highway, and Projected Future Routes) constitute the road classification/hierarchy addressed with these projected improvements. The Projected Future Routes, which are shown to generally run both east-west and north-south, could be Federal or State Highways, County Paved Roadways, or County Maintained Roadways, which may be paved over time as development occurs, use of the roads increases and funds become available through grants, etc. The Projected Future Routes could carry significant amounts of traffic through the County. Minor and primitive roads will continue to be used in Navajo County but are not stressed in the proposed improvements given the relatively limited traffic they carry.

Projected Future Routes for north-south and east-west vehicular traffic. The roads could include improved access: to the Petrified Forest National Park; between the southern portion of the County and the communities along Interstate 40; and along the Mogollon Rim. The roads could also be stronger links to neighboring counties. Some of the roads could serve areas that have been or will be divided into 36 or 40 acre parcels; other roads could serve the future community centers and existing incorporated and unincorporated communities.

Some of the County roads may, over time, be paved. This Plan does not suggest which of the County roads may be paved as that will be a function of the timing of development. Those that become State Highways would be paved. The plan shows various existing roads evolving into several Projected Future Routes. The road network east of State Route 77 could eventually develop due to continued housing growth of the area known as Cedar Hills, both northward and ALSO southward east of White Mountain Lake to U.S. 60. The network around Chevelon Canyon, north of Heber and the Forest Service, continues to experience in-fill and the existing roads could blossom there as well. Existing forest roads could expand usage between the Mogollon Rim to the northern edge of the Forest Service boundary. The area south and southeast of Woodruff could see growth along current roads or new roads that development might cause to happen.

Improvements to or expansions of the existing airports may be appropriate or necessary as the population in the County grows and the area develops.

A possible new spur railroad line that connects the proposed Community Village south of the Petrified Forest National Park to the spur railroad line in Apache County between Navajo and St. Johns and to the spur railroad line between Holbrook and Snowflake. The new line could assist industry in Navajo County through delivery and pick up of goods or products and by serving as an additional method for workers to commute between their homes and job sites.

#### **5.4 Goals and Policies**

**Goal 1: Provide a range of circulation options that are safe and efficient and that complement local communities and the natural environment.**

Policy 1-A: Use available statutory authority to plan for, construct, maintain, and improve circulation facilities and infrastructure.

Policy 1-B: Coordinate land use and circulation planning to encourage comprehensive and efficient development and growth patterns that support adjacent land uses, complement the character of adjacent communities and neighborhoods, and mitigate impacts on the natural environment.

Policy 1-C: Continue to improve the circulation system by the 5 Year Capital Improvement Plan, to facilitate the movement of goods, services, and people throughout Navajo County to support existing businesses and economic investment and reinvestment.

Policy 1-D: Coordinate circulation planning with jurisdictions, including public lands, both within and outside of Navajo County, especially with Apache County, Coconino County, and the Native American Reservations, for projects within three miles of the Navajo County boundary, and with any involved federal or state agency to improve connections to those jurisdictions and to provide a continuous and integrated circulation system.

**Goal 2: Ensure quality design and development of the circulation system.**

Policy 2-A: Plan and develop the circulation system in a consistent, high-quality manner in accordance with the road classification/hierarchy and facility design guidelines.

Policy 2-B: Review existing circulation infrastructure when considering capacity improvements to encourage preservation, improvement, and redevelopment of that infrastructure, where appropriate.

Policy 2-C: Encourage the development of multi-modal and public or private transit facilities as an alternative to new roadway improvements along high-traffic corridors, especially along routes to and from the Forest recreation areas and for commuter use to carry workers to their job sites.

Policy 2-D: Develop circulation infrastructure to promote energy efficiency, protect air quality, and preserve historic, scenic, cultural, and environmental resources.

Policy 2-E: Work with involved entities or public agencies to include special design considerations for circulation improvements that provide access to major tourist destinations, including but not limited to interpretive signs, traffic turnouts, landscape treatment, protection of view corridors, and preservation of natural and cultural resources.

Policy 2-F: Require developers of private circulation infrastructure to meet minimum County standards.

Policy 2-G: Require dedication of rights-of-way through the subdivision process, community master plan, or other review and approval processes.

Policy 2-H: Continue with the appropriate FHWA, AASHTO, and/or other federal guidelines as the minimum construction criteria for new roadways.

**Goal 3: Improve and maintain circulation infrastructure to meet the needs of residents and to protect the natural environment.**

Policy 3-A: Minimize air, water, and noise pollution and disruption of surface water drainage in compliance with federal, state, and local regulations when designing, constructing, and operating circulation infrastructure.

Policy 3-B: Minimize the introduction, movement and proliferation of nonnative, invasive plants through visual inspection, washing, and use of staging areas for construction equipment during infrastructure construction and maintenance.

Policy 3-C: Maintain safe, adequate, and convenient access through infrastructure improvement work sites for all travelers.

Policy 3-D: Use maintenance techniques, such as snow and ice removal, that are consistent with conservation and ecosystem protection.

Policy 3-E: Encourage the use of improvement districts to improve circulation infrastructure through County provision of all appropriate administrative and financial assistance.

Policy 3-F: Require new roads to conform to the natural topography as closely as possible while balancing aesthetics with safety concerns.

**Goal 4: Provide for safe travel and access to property.**

Policy 4-A: consider using the Capital Improvement Plan to direct circulation infrastructure improvement funds to improve safety of high-accident locations.

Policy 4-B: Continue working with developers and property owners to achieve safe and legal access for all properties.

Policy 4-C: Require developers to install or pay for necessary circulation infrastructure improvements to support access to and within major developments or subdivisions.

Policy 4-D: Design circulation infrastructure to accommodate current and future public safety/emergency vehicle needs through provision in new development of connections to existing or potential infrastructure.

Policy 4-E: Include consideration of and planning for pedestrian, equestrian, and bicycle use when designing circulation infrastructure improvements through addition of trails, sidewalks, signage, pavement markings, or other treatments.

Policy 4-F: Make paving of primary transportation corridors and access to developed areas a high priority in the County as provided in the 5 Year Capital Improvement Plan.

Policy 4-G: Approve subdivisions or rezonings only where existing street facilities are adequate or where the developer agrees to pay for off-site improvements necessitated by the proposed development. Consider adoption of either a development fee program that would provide credits for such off-site improvements or another financing mechanism to reimburse a developer for a portion of its expenses when later development occurs that benefits from the improvements.

**Goal 5: Improve non-motorized circulation networks and provide more opportunities for alternative modes of travel.**

Policy 5-A: Encourage planning for non-motorized circulation infrastructure in new development projects.

Policy 5-B: Work with relevant state and federal agencies and property owners to connect existing neighborhoods and communities with trails, non-motorized circulation infrastructure, and multi-modal facilities.

Policy 5-C: Encourage major developments and subdivisions to install pedestrian and bicycle connections to continue the development of a cohesive system of non-motorized circulation infrastructure when such facilities exist on adjacent developments or subdivisions.

Policy 5-D: Encourage consideration of including non-motorized circulation infrastructure in highway development or redevelopment projects.

**Goal 6: Improve transit service opportunities in unincorporated portions of Navajo County.**

Policy 6-A: Consider opportunities to add/expand public and/or private transit services, including use of railroad spurs, as population grows in the County.

Policy 6-B: Support Tribal efforts to establish and maintain inter-city transit between Native American Reservations and surrounding communities.

Policy 6-C: Work with public and private agencies to provide transit services to transit-dependent people.

**Goal 7: Support airport facilities and air travel with limited impacts on the surrounding environment.**

Goal 7-A: Review proposals for airport facilities to ensure compatibility with local land use patterns, this Comprehensive Plan, and County Area Plans.

Goal 7-B: Support improved service at existing airports to move passengers and goods between Navajo County and the region and nation.

Goal 7-C: Work with expanding, renovating, or new airport facilities, including private facilities, to mitigate impacts from aircraft noise on surrounding properties.

Goal 7-D: Work with local communities and the Federal Aviation Administration to address concerns with aircraft noise above Petrified Forest National Park and Homolovi Ruins State Park to provide areas of natural quiet for visitors and residents.

## **6.0 Implementation**

### **6.1 Introduction**

Adoption of the Navajo County Comprehensive Plan is not the final step in the planning process. In order for the Plan to have meaning and to impact the County's future, it must be implemented through adherence to the goals set forth in the Plan and work to achieve the policies established for each goal. Realizing the vision of the Plan will require continued input and assistance from many stakeholders, including Navajo County's property owners, residents, businesses, and public agencies. The County will use its Public Participation Plan to gather this input.

This section establishes a timetable for those actions that are most important to the initial success of this planning effort and for ongoing review of this Plan to keep it current and meaningful. The success of implementation of the Plan is subject to political, fiscal, economic, and social conditions; mid-course corrections of the Plan likely will be necessary. The Development Services Department will take the lead role in this implementation effort.

### **6.2 Timetable**

The following action items are most critical to the initial success of the Plan and should be accomplished by the listed dates. Although fiscal constraints could impact this schedule, an aggressive schedule is set to highlight the importance of these tasks to Plan implementation.

Address fire safety issues through the development and implementation of a Community Fire Plan. Completion date: April 2005.

Amendment of the Navajo County Zoning Ordinance to add neighborhood commercial districts, etc. Completion date: July 2005.

Navajo County Comprehensive Plan  
Proposed amendments  
Draft: October 21, 2010

Prepare informal review process for the Petrified Forest National Park and the Homolovi Ruins State Park to comment on development proposals adjacent to the parks. Completion date: July 2005.

Develop a program to educate Navajo County residents and property owners regarding property maintenance requirements and increase enforcement to encourage residents and owners to maintain their properties in a manner that meets code requirements. Completion date: December 2005.

Prepare methods to address installation of trails/non-motorized transportation in new development. Completion date: December 2005.

The County may expand this list as items are completed during its review of the Plan. Many of the Plan's policies will require ongoing work and monitoring and may begin immediately, such as working to improve technology for Navajo County staff, reviewing zoning changes against the Plan, requiring dedication of right-of-way as part of the subdivision process, and encouraging all utilities to adopt five and ten year phasing plans to accommodate growth in the County.

### 6.3 Plan Review

Arizona Statutes restrict the effective period for a comprehensive plan to 10 years from the date of adoption (A.R.S. § 11-824.B). The Board of Supervisors must readopt the comprehensive plan for up to another 10 years or adopt a new plan on or before the 10<sup>th</sup> anniversary of the adoption.

This Plan encourages review every five years as a policy. Such review could include a full public participation process with meetings in different County locations to solicit input regarding the Plan and any desired or necessary changes. These reviews would help keep the Plan current and meaningful as conditions change in the County.

On an annual basis, the Development Services Director and the Planning and Zoning Commission may review the Plan at a Commission meeting to adjust the Implementation Timetable, add items to the list of implementation actions, and determine whether to suggest Plan revisions to the Board of Supervisors. Although less formal than the reviews discussed above, an annual assessment of the Plan would underscore the importance of the Plan and keep its implementation as a high priority for the County.